

#### Public Health Preparedness and Situational Awareness Report: #2019:08

Reporting for the week ending 02/23/19 (MMWR Week #08)

March 1, 2019

## **CURRENT HOMELAND SECURITY THREAT LEVELS**

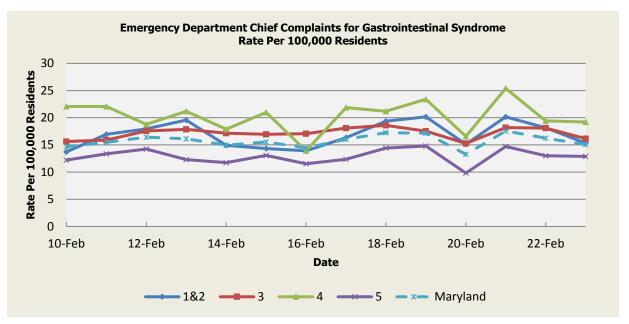
**National:** No Active Alerts

**Maryland:** Normal (MEMA status)

#### **SYNDROMIC SURVEILLANCE REPORTS**

**ESSENCE** (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

# **Gastrointestinal Syndrome**

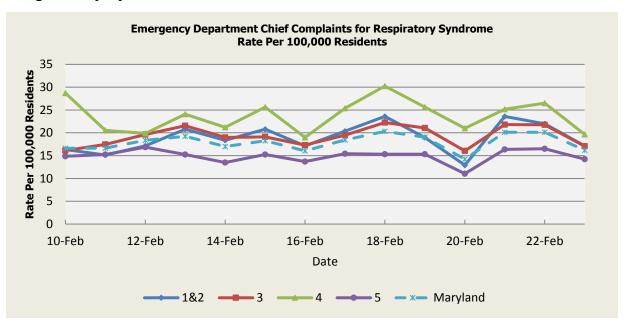


There were five (5) Gastrointestinal Syndrome outbreaks reported this week: one (1) outbreak of Gastroenteritis in a Nursing Home (Region 3); two (2) outbreaks of Gastroenteritis in Assisted Living Facilities (Region 3); one (1) outbreak of Gastroenteritis/Foodborne associated with a Restaurant (Region 3); one (1) outbreak of Gastroenteritis/Foodborne associated with a Private Home (Region 3).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	13.13	15.05	15.80	10.17	13.08		
Median Rate*	13.11	14.83	15.24	10.08	12.95		

<sup>\*</sup> Per 100,000 Residents

## **Respiratory Syndrome**

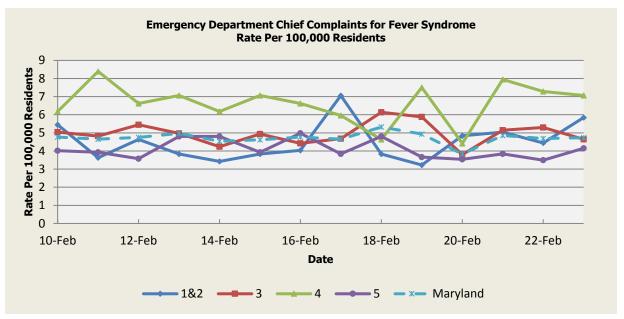


There were five (5) Respiratory Syndrome outbreaks reported this week: one (1) outbreak of Influenza in a Hospital (Regions 1&2); one (1) outbreak of Influenza in a Nursing Home (Region 3); one (1) outbreak of Influenza in a Treatment Center (Region 3); one (1) outbreak of Influenza associated with a School (Region 5); one (1) outbreak of Ili/Pneumonia in an Assisted Living Facility (Region 5).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	12.56	14.66	14.96	9.94	12.70	
Median Rate*	12.10	14.10	14.35	9.56	12.21	

\* Per 100,000 Residents

# **Fever Syndrome**

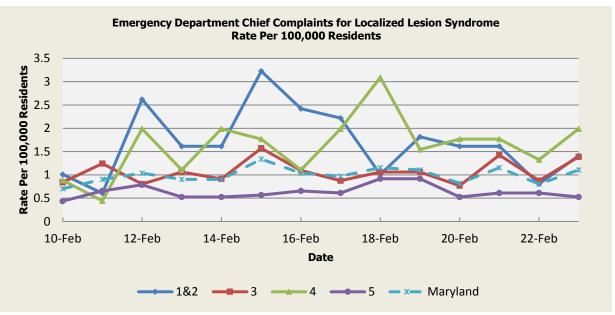


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	3.04	3.88	4.06	3.03	3.50	
Median Rate*	2.82	3.76	3.97	2.92	3.38	

\*Per 100,000 Residents

# **Localized Lesion Syndrome**

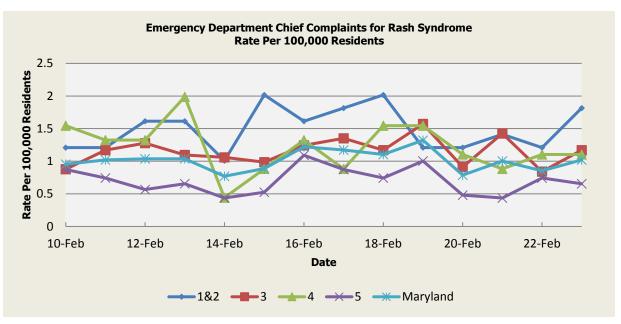


There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.09	1.81	2.04	0.92	1.43	
Median Rate*	1.01	1.75	1.99	0.87	1.37	

<sup>\*</sup> Per 100,000 Residents

# **Rash Syndrome**

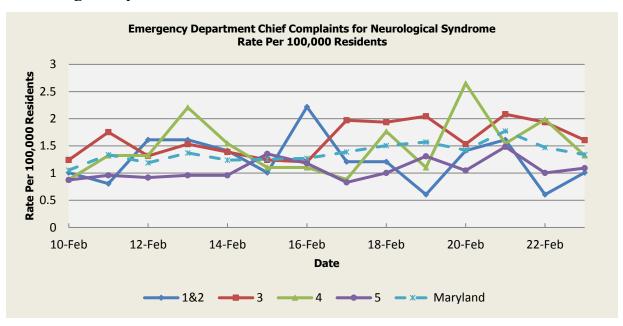


There were no Rash Syndrome outbreaks reported this week

	Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.22	1.69	1.77	0.99	1.39	
Median Rate*	1.21	1.61	1.77	0.96	1.32	

<sup>\*</sup> Per 100,000 Residents

# **Neurological Syndrome**

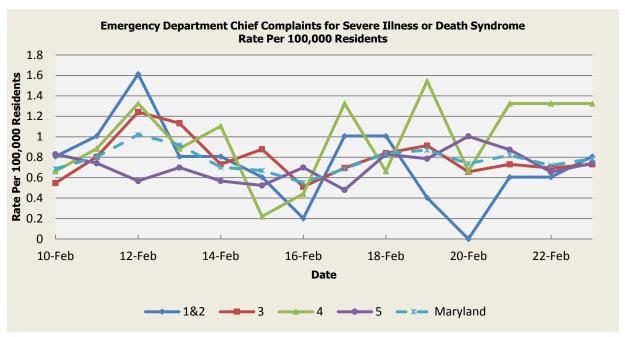


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.75	0.92	0.83	0.58	0.77	
Median Rate*	0.60	0.80	0.66	0.52	0.67	

<sup>\*</sup> Per 100,000 Residents

# **Severe Illness or Death Syndrome**



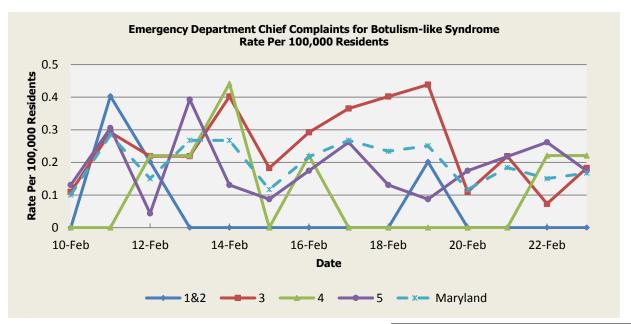
There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data							
	January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	0.66	0.90	0.83	0.50	0.72			
Median Rate*	0.60	0.88	0.66	0.48	0.69			

<sup>\*</sup> Per 100,000 Residents

## **SYNDROMES RELATED TO CATEGORY A AGENTS**

## **Botulism-like Syndrome**

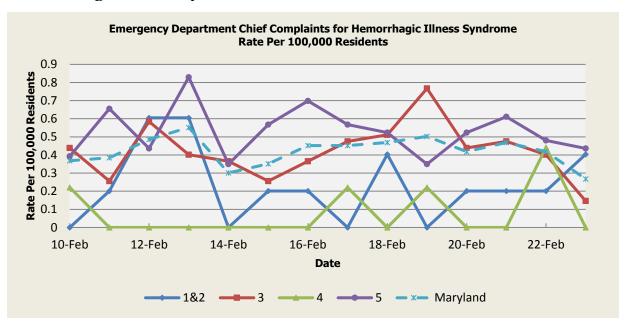


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 2/11 (Regions 1&2,3,5), 2/12 (Regions 1&2,4), 2/13 (Regions 4,5), 2/14 (Regions 3,4), 2/16 (Regions 3,4,5), 2/17 (Regions 3,5), 2/18 (Region 3), 2/19 (Regions 1&2,3), 2/20 (Region 5), 2/21 (Region 5), 2/22 (Regions 4,5), 2/23 (Regions 4,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.07	0.12	0.05	0.07	0.09	
Median Rate*	0.00	0.07	0.00	0.04	0.07	

<sup>\*</sup> Per 100,000 Residents

## Hemorrhagic Illness Syndrome

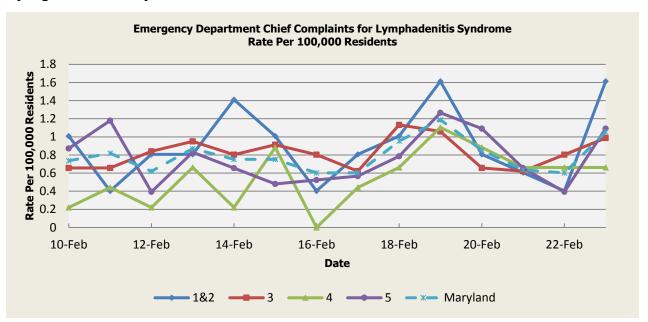


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 2/10 (Regions 3,4,5), 2/11 (Regions 1&2,5), 2/12 (Regions 1&2,3,5), 2/13 (Regions 1&2,5), 2/14 (Regions 3,5), 2/15 (Regions 1&2,5), 2/16 (Regions 1&2,3,5), 2/17 (Regions 3,4,5), 2/18 (Regions 1&2,3,5), 2/19 (Regions 3,4,5), 2/20 (Regions 1&2,3,5), 2/21 (Regions 1&2,3,5), 2/22 (Regions 1&2,3,4,5), 2/23 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.04	0.15	0.04	0.12	0.12		
Median Rate*	0.00	0.07	0.00	0.04	0.07		

<sup>\*</sup> Per 100,000 Residents

# Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 2/10 (Regions 1&2,5), 2/11 (Region 5), 2/12 (Regions 1&2), 2/13 (Regions 1&2), 2/14 (Regions 1&2), 2/15 (Regions 1&2,4). 2/17 (Regions 1&2), 2/18 (Regions 1&2,5), 2/19 (Regions 1&2,4,5), 2/20 (Regions 1&2,4,5), 2/23 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.35	0.57	0.39	0.36	0.46		
Median Rate*	0.20	0.47	0.44	0.31	0.40		

<sup>\*</sup> Per 100,000 Residents

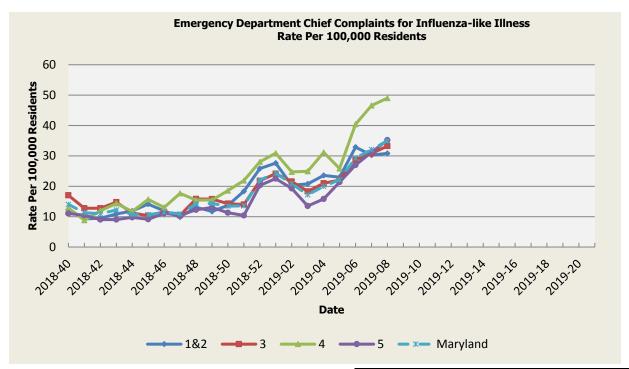
# MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surfeeds into ESSENCE is currently being validated. We will include once the validation process is complete.	
	(report continues on next page

## SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 08 was: High Intensity.

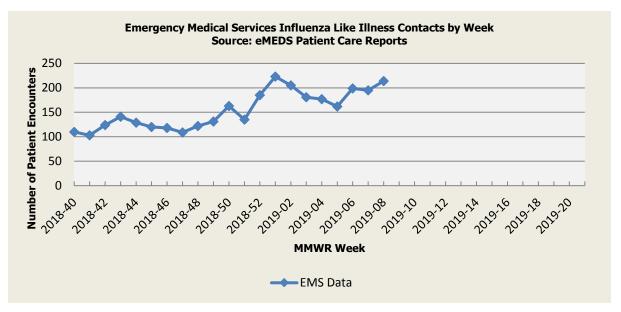
#### **Influenza-like Illness**



	Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	9.91	13.09	12.52	11.12	12.03	
Median Rate*	7.66	10.16	9.05	8.60	9.17	

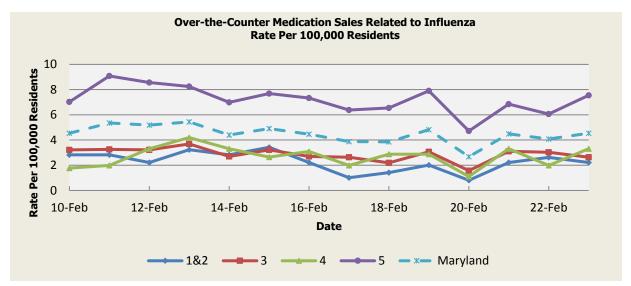
<sup>\*</sup> Per 100,000 Residents

# Influenza-like Illness Contacts by Week



**Disclaimer on eMEDS flu related data**: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

## **Over-the-Counter Influenza-Related Medication Sales**

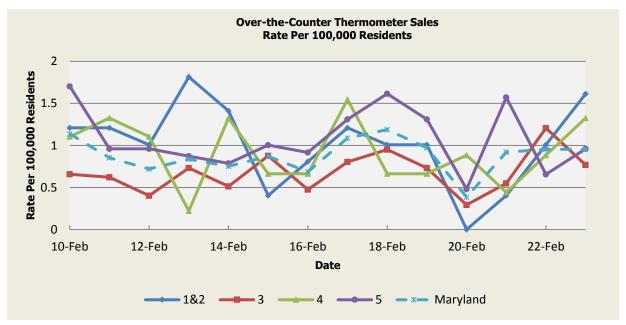


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.61	4.66	2.74	8.09	5.74
Median Rate*	3.02	3.87	2.43	7.47	5.05

<sup>\*</sup> Per 100,000 Residents

## **Over-the-Counter Thermometer Sales**



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.10	2.96	2.34	3.93	3.29
Median Rate*	2.82	2.81	2.21	3.75	3.15

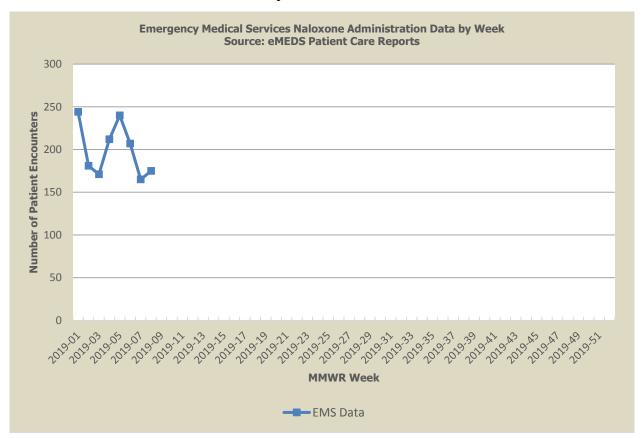
<sup>\*</sup> Per 100,000 Residents

#### SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

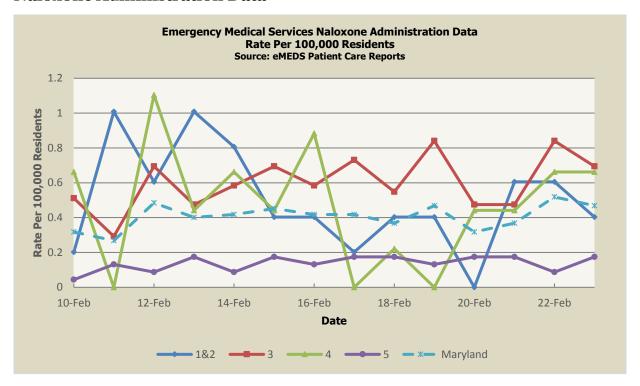
In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

## Naloxone Administration Data by Week



**Disclaimer on eMEDS naloxone administration related data**: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

## **Naloxone Administration Data**



**Disclaimer on eMEDS Naloxone administration related data**: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

#### PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase**: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of February 28, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

#### **AVIAN INFLUENZA**

There were no relevant avian influenza reports this week.

#### **HUMAN AVIAN INFLUENZA**

There were no relevant human avian influenza reports this week.

#### NATIONAL DISEASE REPORTS

**LEGIONELLOSIS** (**NORTH DAKOTA**), 24 Feb 2019, North Dakota health officials say 3 people have contracted Legionnaire's disease linked to a hotel water park in Casselton [North Dakota]. The 3 people became sick between last July [2018] and January [2019], and all 3 reported spending some time at the Days Inn of Casselton. The Health Department says anyone who spent time at the hotel this month [February 2019] and has become sick should see a doctor. Read More: http://www.promedmail.org/post/6334167

**LEGIONELLOSIS** (**NEW YORK**), 23 Feb 2019, A total of 2 people in Albany County [New York State (NYS)] have tested positive for Legionella -- and one of them has died. The exact cause of death has not been confirmed.

The Albany County Department of Health has launched an investigation, linking both cases to the Promenade Assisted Living facility in Albany. Water samples there have tested positive for the bacteria [\_Legionella\_ species] that cause Legionnaires' disease. Read More: <a href="http://www.promedmail.org/post/6332765">http://www.promedmail.org/post/6332765</a>

**HAEMOPHILUS INFLUENZAE, TYPE B (NEBRASKA),** 21 Feb 2019, A Nebraska daycare facility is asking parents of non-immunized children to keep their kids at home after one of its employees was hospitalized with a rare, and potentially life-threatening, airborne bacterial infection. Bright Beginnings daycare sent a letter home to parents on 20 Feb 2019, urging parents to take precautions after the staff member contracted epiglottitis, Omaha's WOWT-TV reported. Read More: <a href="http://www.promedmail.org/post/6329527">http://www.promedmail.org/post/6329527</a>

#### **INTERNATIONAL DISEASE REPORTS**

**MERS-COV** (**SAUDI ARABIA**), 26 Feb 2019, In the two days since the last update (23 Feb 2019) there have been a total of 3 newly confirmed cases of MERS-CoV infection, including 1 death, reported by Saudi Arabia. In addition, there were 3 recoveries of previously confirmed cases reported during this period. Read More: <a href="http://www.promedmail.org/post/6335886">http://www.promedmail.org/post/6335886</a>

**LISTERIOSIS** (**VICTORIA**), 23 Feb 2019, An elderly woman has died and there are fears thousands of others may be at risk following a Listeria outbreak. A caller tipped off the Neil Mitchell program about the outbreak at the Dandenong South commercial food caterer, I Cook Foods, which was later confirmed by the Department of Health and Human Services. Read More: <a href="http://www.promedmail.org/post/6332766">http://www.promedmail.org/post/6332766</a>

LASSA FEVER (NIGERIA), 22 Feb 2019, A popular and deadly disease caused by [a virus in] rodents, Lassa fever, has killed 10 persons and infected 28 others in Plateau state, Nigeria. Naija News reports that Plateau State commissioner for health Dr Kunden Deyin, while confirming the cases of the fever, said that 64 cases were taken to the laboratory for confirmation; of these, 28 were confirmed to be Lassa fever. According to Deyin, the state has recorded 28 new cases of Lassa fever with 10 deaths. Read More: <a href="http://www.promedmail.org/post/6331712">http://www.promedmail.org/post/6331712</a>

**HEPATITIS E (NAMIBIA),** 21 Feb 2019, Statistics from the Ministry of Health and Social Services show that as of [27 Jan 2019], a total 4432 hepatitis E cases had been reported in Namibia. So far, 40 deaths have been reported and the death toll is disproportionately highest among pregnant women and those who have given birth, constituting 17 cases, which translates to 42.5% of deaths. Minister of Health and Social Services, Dr. Kalumbi Shangula said he has had a chance to interact with teams that are charged with the hepatitis E outbreak control at national and regional levels. Read More: <a href="http://www.promedmail.org/post/6329433">http://www.promedmail.org/post/6329433</a>

**VARICELLA (TAIWAN),** 21 Feb 2019, A total of 981 people were diagnosed with chicken pox nationwide last week, the Centers for Disease Control (CDC) said yesterday [Tue 19 Feb 2019]. The figure was higher than the previous 3 weeks and the highest reported during the same week in the past 5 years, the centers said, adding that most of those diagnosed with the disease were children and adolescents between 5 and 14 years old. Read More: <a href="http://www.promedmail.org/post/6329335">http://www.promedmail.org/post/6329335</a>

#### OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <a href="http://preparedness.health.maryland.gov/">http://preparedness.health.maryland.gov/</a> or follow us on Facebook at <a href="http://www.facebook.com/MarylandOPR">www.facebook.com/MarylandOPR</a>.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <a href="http://flusurvey.health.maryland.gov">http://flusurvey.health.maryland.gov</a>

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**NOTE**: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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# Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Dagiana 1 % 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Pagion 2	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

